

Title (en)

LIGHTING DEVICE AND METHOD FOR MANUFACTURING SAID LIGHTING DEVICE

Title (de)

BELEUCHTUNGSVORRICHTUNG UND VERFAHREN ZUR HERSTELLUNG DIESER BELEUCHTUNGSVORRICHTUNG

Title (fr)

DISPOSITIF D'ÉCLAIRAGE ET PROCÉDÉ DE FABRICATION DUDIT DISPOSITIF D'ÉCLAIRAGE

Publication

EP 3587914 A1 20200101 (EN)

Application

EP 18382475 A 20180626

Priority

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Abstract (en)

The lighting device (1) comprises a light guide (2) comprising two or more layers (21, 22, 25); and a light source (3) that illuminates said light guide (2), wherein said two or more layers (21, 22, 25) define at least one surface (23, 26) between two adjacent layers (21, 22, 25), geometric motives (24) being formed in said at least one surface (23, 26). The method for manufacturing said lighting device comprises the following steps: providing one layer (21); forming geometric motives (24) in said one layer (21); providing another layer (22) injected directly to the geometric motives (24) defining a surface (23) between said layers (21, 22). It provides a better homogenous illuminance and a better photometric performance.

IPC 8 full level

F21V 8/00 (2006.01); **F21S 43/239** (2018.01)

CPC (source: EP US)

F21S 43/14 (2017.12 - EP); **F21S 43/239** (2017.12 - EP); **F21S 43/245** (2017.12 - EP); **F21S 43/50** (2017.12 - EP); **G02B 6/0055** (2013.01 - US); **G02B 6/006** (2013.01 - EP); **G02B 6/0065** (2013.01 - US); **G02B 6/0073** (2013.01 - US); **G02B 6/0076** (2013.01 - EP); **G02B 6/3668** (2013.01 - US); **F21K 9/237** (2016.07 - US)

Citation (applicant)

US 2017097135 A1 20170406 - FRITZ DANIEL [DE], et al

Citation (search report)

- [XAI] US 2004042196 A1 20040304 - KRAFT EDWARD R [US]
- [XII] US 2016377798 A1 20161229 - DHAR BAL MUKUND [US]
- [XII] US 6239851 B1 20010529 - HATAZAWA TSUYONOBU [JP], et al
- [XII] US 2014270672 A1 20140918 - DURKEE JOHN W [US]
- [XAI] US 2014119033 A1 20140501 - VASYLYEV SERGIY VICTOROVICH [US]
- [A] WO 2014105408 A2 20140703 - 3M INNOVATIVE PROPERTIES CO [US]

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

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